

Electromagnetic compatibility of antennas on a mobile board

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Abstract

This paper presents the solutions of the problem of optimizing the decrease of antenna coupling coefficients on a mobile board in the case of limitations on the coverage for each antenna. To determine the minimum value of antenna coupling coefficient for one pair of antennas we use the Gauss-Zeidel optimization method or the search method. When two or several antenna pairs have a common antenna the coordinates of this antenna are determined by compromise. The algorithms of optimum antenna placement are supported by computer software and are tested for the case of four antennas.
